

**Surf Site Monitoring Results  
Bamburas to Kapua Channnel  
Clean Water Branch, DOH  
May 2, 2006**

*Colony Forming Units/100mL*

<b><u>Surf Site</u></b>	<b><u>Time</u></b>	<b><u>Enterococci</u></b>	<b><u>C. perfringens</u></b>	<b><u>Salinity</u></b>
<b>Bamburas (s)*</b>	<b>7:15 am</b>	<b>2.3</b>	<b>1</b>	<b>NA</b>
<b>Bamburas (b)**</b>	<b>7:15 am</b>	<b>2.3</b>	<b>&lt;1</b>	<b>NA</b>
<b>Ala Moana Bowls (s)</b>	<b>8:00 am</b>	<b>53</b>	<b>7</b>	<b>33.05</b>
<b>Ala Moana Bowls (b)</b>	<b>8:00 am</b>	<b>2.3</b>	<b>4</b>	<b>34.73</b>
<b>Rockpile (s)</b>	<b>8:05 am</b>	<b>2.3</b>	<b>2</b>	<b>34.44</b>
<b>Rockpile (b)</b>	<b>8:05 am</b>	<b>2.3</b>	<b>2</b>	<b>34.80</b>
<b>Kaisers (s)</b>	<b>8:10 am</b>	<b>2.3</b>	<b>1</b>	<b>34.74</b>
<b>Kaisers (b)</b>	<b>8:10 am</b>	<b>2.3</b>	<b>2</b>	<b>34.87</b>
<b>Fours (s)</b>	<b>8:15 am</b>	<b>2.3</b>	<b>3</b>	<b>34.97</b>
<b>Fours (b)</b>	<b>8:15 am</b>	<b>2.3</b>	<b>1</b>	<b>35.02</b>
<b>Poplars (s)</b>	<b>8:20 am</b>	<b>2.3</b>	<b>&lt;1</b>	<b>34.96</b>
<b>Poplars (b)</b>	<b>8:20 am</b>	<b>2.3</b>	<b>1</b>	<b>35.09</b>
<b>Canoes (s)</b>	<b>8:25 am</b>	<b>2.3</b>	<b>&lt;1</b>	<b>35.05</b>
<b>Canoes (b)</b>	<b>8:25 am</b>	<b>2.3</b>	<b>1</b>	<b>35.03</b>
<b>Queens (s)</b>	<b>8:30 am</b>	<b>2.3</b>	<b>1</b>	<b>35.05</b>
<b>Queens (b)</b>	<b>8:30 am</b>	<b>2.3</b>	<b>&lt;1</b>	<b>35.04</b>
<b>Publics (s)</b>	<b>8:35 am</b>	<b>10</b>	<b>2</b>	<b>35.05</b>
<b>Publics (b)</b>	<b>8:35 am</b>	<b>2.3</b>	<b>&lt;1</b>	<b>35.01</b>
<b>Kapua Channel (s)</b>	<b>8:40 am</b>	<b>2.3</b>	<b>1</b>	<b>35.10</b>
<b>Kapua Channel (b)</b>	<b>8;40 pm</b>	<b>2.3</b>	<b>2</b>	<b>35.09</b>

**\*surface**

**\*\*8 foot depth**

Results of Analyses  
Wastewater Spill Monitoring –  
Beachwalk SPS Spill (Shoreline Stations)  
May 4, 2006

Samples collected Wednesday, May 3, 2006 (41<sup>st</sup> day):  
Spill reported on March 24, 2006.  
NPDES Permit No. HI 0020117.

<u>Station</u>	<u>Collection Time</u>	<u>Bacterial Counts / 100 mL</u>			<u>Salinity</u>
		<u>Fecal Coliform<sup>iv</sup></u>	<u>Enterococci<sup>v</sup></u>	<u>C. perfringens<sup>vi</sup></u>	
Magic Island Finger	7:40 A.M.	20	16	12	31.8
Ala Moana Canoe Launch Ramp	7:33 A.M.	73	68	15	24.6
Magic Island Lagoon	7:43 A.M.	1	1	4	34.3
Ala Wai Harbor Boat Launch Ramp	7:52 A.M.	90	140	21	18.2
Hilton Lagoon	7:58 A.M.	1	< 1	3	33.8
Hale Koa Hotel	8:21 A.M.	26	4	7	33.7
Halekulani-Sheraton	8:36 A.M.	> 60	1	3	34.0
Moana Hotel	8:47 A.M.	54	50	< 1	34.3
Kapahulu Groin	8:54 A.M.	1	2	< 1	33.9
Queen's Surf Beach	8:58 A.M.	< 1	7	< 1	34.6
Natatorium	9:08 A.M.	< 1	< 1	< 1	34.2

Weather: Partly cloudy

## Results of Analyses

### Wastewater Spill Monitoring – Beachwalk SPS Spill

May 4, 2006

Samples collected Wednesday, May 3, 2006 (41<sup>st</sup> day):

Spill reported on March 24, 2006.

NPDES Permit No. HI 0020117.

<u>Station</u>	<u>Collection Time</u>	<u>Bacterial Counts / 100 mL</u>			<u>Salinity</u>
		<u>Fecal Coliform</u> <sup>4</sup>	<u>Enterococci</u> <sup>5</sup>	<u>C. perfringens</u> <sup>6</sup>	
Date St.-Upstream	10:00 A.M.	700	860	40	0.4
Seaside Ave.-Upstream	9:29 A.M.	210	90	10	12.3
Kaiolu St.-Spill site	9:33 A.M.	210	80	10	11.4
McCully St. Bridge.	9:43 A.M.	640	500	27	6.5
Ala Moana Blvd. Bridge	9:48 A.M.	450	210	25	18.3

Weather: Overcast.

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<sup>4</sup> APHA, AWWA, WEF, Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition, 1992, Membrane Filter Method for Fecal Coliform.

<sup>5</sup> Improved Enumeration Methods for the Recreational Water Quality Indicators: Enterococci and *Escherichia coli*, EPA/821/R-97/004, March 2000, Membrane Filter Method 1600 for Enterococci.

<sup>6</sup> Bisson, J.W., Cabelli, V.J., "Membrane Filter Enumeration Method for *Clostridium perfringens*," Applied and Environmental Microbiology, Jan 1978; Armon, R., Payment, P., "A Modified mCp Medium for Enumerating *C. perfringens* from Water Samples," Canadian Journal of Microbiology, 1988.

## Results of Analyses

### Wastewater Spill Monitoring – Kaneohe PTF Spill

May 4, 2006

Samples collected Wednesday, May 3, 2006 (33<sup>rd</sup> day):

Spill reported on March 31, 2006.

NPDES Permit No. HI 0021296.

<u>Station</u>	<u>Collection Time</u>	<u>Bacterial Counts / 100 mL</u>			<u>Salinity</u>
		<u>Fecal Coliform<sup>4</sup></u>	<u>Enterococci<sup>5</sup></u>	<u>C. perfringens<sup>6</sup></u>	
Kaneohe PTF-spill site	8:35 A.M.	1,600	700	15	2.4
Upstream-Kawa Stream	8:22 A.M.	3,000	800	21	< 0.1
Mahalani Circle	8:50 A.M.	38	12	19	31.1
Mikiola Dr.-RoW	8:11 A.M.	24	11	5	32.6

Weather: Partly cloudy.

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<sup>4</sup> APHA, AWWA, WEF, Standard Methods for the Examination of Water and Wastewater, 18<sup>th</sup> Edition, 1992, Membrane Filter Method for Fecal Coliform.

<sup>5</sup> Improved Enumeration Methods for the Recreational Water Quality Indicators: Enterococci and *Escherichia coli*, EPA/821/R-97/004, March 2000, Membrane Filter Method 1600 for Enterococci.

<sup>6</sup> Bisson, J.W., Cabelli, V.J., "Membrane Filter Enumeration Method for *Clostridium perfringens*," Applied and Environmental Microbiology, Jan 1978; Armon, R., Payment, P., "A Modified mCP Medium for Enumerating *C. perfringens* from Water Samples," Canadian Journal of Microbiology, 1988.